

Bachelor of Science
Computer Information Systems
Software Engineering and Database Design Concentration
 2026-2027 Transfer Guide
 Texas A&M University–Central Texas

The courses outlined in this section provide a year-by-year guide for full-time students, fulfilling the requirements for the **Bachelor of Science in Computer Information Systems with a Software Engineering and Database Design Concentration** at Texas A&M University–Central Texas. All guides can be adjusted to accommodate the needs of part-time students. For the official degree requirements, please refer to the Texas A&M University–Central Texas [catalog](#).

BACHELOR OF SCIENCE IN COMPUTER INFORMATION SYSTEMS WITH A SOFTWARE ENGINEERING AND DATABASE DESIGN CONCENTRATION

YEAR 1 **TOTAL HOURS:30**

CORE 010 ¹ – Communication	3 SCH
CORE 020 ^{1,3} – Mathematics	3 SCH
CORE 060 ¹ – American History	3 SCH
ECON 2302 – Principles of Microeconomics (CORE 080)	3 SCH
ELECTIVE ^{1,2,3} – Any Level Elective	3 SCH
CHOOSE ONE: SPCH 1311 – Introduction to Speech Communication (CORE 010)	
SPCH 1315 – Public Speaking <i>or</i>	
SPCH 1321 – Business & Professional Communication	3 SCH
CORE 050 ¹ – Creative Arts	3 SCH
CORE 060 ¹ – American History	3 SCH
CORE 090 ^{1,3} – Component Area Option	3 SCH
ELECTIVE ^{1,2,3} – Any Level CIS Elective	3 SCH

YEAR 2 **TOTAL HOURS:30**

CORE 030 ^{1,3} – Life and Physical Sciences	3 SCH
CORE 070 ¹ – Government/Political Science	3 SCH
CORE 090 ^{1,3} – Component Area Option	3 SCH
ELECTIVE ^{1,2,3} – Any Level Elective	3 SCH
ELECTIVE ^{1,2,3} – Any Level Elective	3 SCH
CORE 030 ^{1,3} – Life and Physical Sciences	3 SCH
CORE 040 ¹ – Language, Philosophy, and Culture	3 SCH
CORE 070 ¹ – Government/Political Science	3 SCH
ELECTIVE ^{1,2,3} – Any Level Elective	3 SCH
ELECTIVE ^{1,2,3} – Any Level Elective	3 SCH

YEAR 3 **TOTAL HOURS:27**

CHOOSE ONE: CIS 3300 ³ – Computer Technology and Impact	
BCIS 1305 – Business Computer Applications <i>or</i>	
COSC 1301 – Introduction to Computing	3 SCH
CHOOSE ONE: CIS 3303 – Programming Logic and Design <i>or</i>	
COSC 1315 – Fundamentals of Programming	3 SCH
CIS 3315 – Web Site Development and Design	3 SCH
CHOOSE ONE: CIS 3330 ³ – C++ Programming	
CIS 3331 – Visual Basic Programming	
CIS 3332 – Java Programming	
COSC 1320 – C Programming I <i>or</i>	
COSC 1336 – Programming Fundamentals I	3 SCH
CHOOSE ONE: CIS 3340 – Advanced C++ Programming	

CIS 3342 – Advanced Java Programming or CIS 3343 – C# Programming for Windows and the Web	3 SCH
BUSI 3311 – Business Statistics	3 SCH
CIS 4341 – Information Technology Security and Risk Management	3 SCH
CIS 3347 – Data Communications and Infrastructure	3 SCH
CIS 3360 – Ethics in Computing	3 SCH
YEAR 4	TOTAL HOURS:33
CIS 4350 – Management Information Systems	3 SCH
CIS 4351 – IS Project Management	3 SCH
CIS 3365 – System Analysis and Design	3 SCH
CIS 4301 – Database Theory and Practices	3 SCH
CIS 3351 – Data Structures	3 SCH
CIS 4360 – Strategic Information Systems	3 SCH
CIS 4340 – Algorithm Design and Analysis	3 SCH
CIS 4352 – Structured Query Language	3 SCH
CIS 4379 – Software Engineering for E-Business	3 SCH
ELECTIVE – Upper-Level CIS Elective or Upper-Level COSC Elective	3 SCH
ELECTIVE – Upper-Level CIS Elective or Upper-Level COSC Elective	3 SCH
CIS 4090 – Computer Information Systems Capstone Assessment	0 SCH

TOTAL CREDITS: 120 HOURS

NOTES

Texas A&M–Central Texas only offers upper-level courses (those labeled 3XXX-5XXX), all lower-level courses (those labeled 1XXX-2XXX) should be completed at the transferring institution. A minimum of 120 semester credit hours is required for all baccalaureate degrees. For help with transfer planning, please speak with an [academic advisor](#) or [enrollment specialist](#). ***This transfer guide is intended for planning and visualization purposes and is subject to change.***

1. Refer to the General Education Core Requirements [page](#) for more information on the CORE Requirement coursework.
2. Any level electives may be taken at either at Texas A&M University-Central Texas or another institution. Please consult an academic advisor prior to selecting any-level electives.
3. Lower Level Electives, Any Level Electives, Component Area Options, or Degree Requirements (DEG REQ) may consist of the FOS courses: MATH 2413, MATH 2414, MATH 2305, COSC 1436, COSC 1437, COSC 2436, PHYS 2425, PHYS 2426 (or 3 credit hour lecture and 1 hour lab courses for PHYS), one of the following: COSC 2325, COSC 2425.